

**Before the
Federal Communications Commission
Washington, D. C. 20554**

In the Matter of

**Rules and Regulations Implementing the
Telephone Consumer Protection Act (TCPA) of 1991**

47 CFR Part 64

**CG Docket No. 02-278
CC Docket No. 92-90
FCC 02-250**

COMMENTS AND RECOMMENDATIONS

OF

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Summary

Avinta[®] Communications, Inc. (Avinta[®]) respectfully requests the Commission to consider a new approach to deal with issues surrounding the abuse of telephone services. This subject is frequently mentioned as Telemarketer Calls, although it belongs to a more general class known as Unwanted Calls. Instead of focusing on a specific case, a generic solution has become available. If the public is made aware of such capability, nearly all of such consumer frustrations can be eliminated.

An improvement to conventional telephone station instrument is all what need be done to achieve the above goal. This can be implemented at retail consumer electronics level and customized according to individual's personal preferences and needs.

The implementation cost is rather minimal. Furthermore, this is the first step to modernize the CPE (Customer Premise Equipment) for entering the broadband era.

1. Introduction

In the Commission's Notice of Proposed RuleMaking (NPRM) released on September 18, 2002, published in Federal Register/ Vol. 67, No. 195/ Tuesday, October 8, 2002 (67 FR 62667), the Commission stated at the end of paragraph 21 (Para. II. B. 1. b. Network Technologies):

"We seek comment of whether we should consider any other technologies in this context, and, if so, we ask commenters to include a brief explanation of how these technologies operate and how much they would cost to implement."

Avinta[®] would like to base on the above invitation to submit the following analysis, solution and recommendation for the Commission's consideration.

2. Root Cause Analysis

A. For a telephone connection to be established, there are three parties involved, the Caller or the Originating (the Calling) party, the Network (PSTN – Public Switched Telephone Network) and the Destination or Terminating (the Called) party.

B. Since a Caller of one telephone call could be the Called of another, the equipment they use is basically built as "two-in-one". That is, the same CPE is used for both cases, although not all available capabilities are fully utilized in either application. The most common CPE instrument is the telephone set. This has worked very well for ordinary telephone calls.

C. However, if the Caller intends to use or configure his/hers CPE in a more "advanced" fashion than the Called party is ready to deal with, the imbalance imposes difficulties onto the Called party. This subject is highlighted by Telemarketer Calls that

are now frequently originated by Predictive Dialers. Much attention has been focused on the Telemarketing industry as the Calling party and the associated CPE being utilized. This has led to conflicting issues.

D. The Commission's question in the NPRM was directed to possible solutions from the Network. Since PSTN's primary charter is to provide connection between two end parties, offering screening service would be against its basic operation guidelines.

E. Fortunately, within the last of the three parties, there is a CPE technology already developed for the Called side that is called AA (Auto Attendant). This capability is commonly used by business enterprises for speeding up call routing. Among other functions, an AA prevents a Caller from reaching any Called party by virtue of requesting for an Extension number from the Calling party. Without submitting it correctly, the Caller is blocked by the AA, quietly. If this capability were deployed on the Called side of all CPE, the Unwanted Call incidences would have been totally eliminated.

F. For the purpose of discussing a single line telephone service to a single person residential setting, this Extension number requested by the AA could be viewed as a Secret code selected by the owner that is known only by a limited group of desired Callers.

G. The remaining question is whether this AA equipment can be made small size and low cost enough to be affordable to the mass public.

3. CPE Product for Consumer

A. A dPABX (distributed Private Automatic Branch eXchange, US Patent No.: 5,596,631, Date: January 21, 1997) for single line telephone service has eliminated this last hurdle. This technology has been implemented as stand-alone add-on modules to work with existing telephone instruments, as well as built into new telephone sets. Both forms are readily available, neither requires any handling of the existing on-premise telephone wiring, nor any changes in the PSTN. Furthermore, the operation of this dPABX module is entirely independent of the type of CPE that the Calling party may be using.

B. The basic installation of the dPABX for providing the AA service consists of the following few simple steps:

- a. Plug a common TAD (Telephone Answering Device) into a wall outlet jack.
- b. Set a Secret code (Extension number) on a dPABX module (about the same size as the TAD), and then plug it into the jack on the back of the TAD.
- c. Lastly, plug a telephone station instrument into the outlet jack on the back of the dPABX module.

C. Upon an incoming call, the dPABX module blocks the telephone CO (Central Office) ringing signals from reaching the station instrument, allowing the TAD to quietly respond and play the greeting message pre-recorded by the owner.

D. A knowledgeable Caller would then dial the Secret code (Extension number) using DTMF (Dual Tone Multi-Frequency or commonly known as “Touch Tone[®]”) keypad.

E. If the code dialed matches with that preset by the owner on the dPABX module, it responds by putting the line on “Hold”, and beginning to ring the station instrument behind it.

F. The action of the dPABX in the last step triggers the TAD to disconnect from the line due to a common TAD capability, known as EXT INT (EXTension INTerrupt). As far as the Caller is concerned, his/her call has passed through the AA screening.

G. Callers who do not have the Secret code may leave a Voice Message (VM) in this AA TAD, if so wished. These include all unexpected and unwanted callers. It will then be under the Called party’s full control to decide, when to listen to the VMs, whether to return any call or to inform certain parties about the Secret code.

H. Considering the possibility that the Called party may not be nearby the telephone set when a call arrives after passed through the AA screening, a personal VM module (a second TAD) may be connected on the side of the telephone set in the same manner that most people are very used to do, nowadays.

4. Cost

A series of retail products under the trade name Call Sentry[™] is available:

A. The configuration described in the last section is modular and compatible with all existing telephone station instrument being used and sold in the consumer market. It will work with any and all FCC Part 68 compliant CPE instruments. However, due to its “dual personality” (appearing to the CO as a telephone station set while exhibiting CO equivalent capabilities towards the instrument connected behind it), this add-on module is most costly. Currently, it is sold at retail price of \$69.99.

Note that this full function module is capable of ringing multiple station sets, simultaneously. With proper installation (requires drilling a small telephone wire access hole through the garage wall to the NID - Network Interface Device), one of this unit can guard multiple telephone sets in the entire household.

B. A new telephone set with the equivalent function built-in, would cost less than \$20.00 incremental retail price over a conventional telephone.

C. Another configuration with dPABX capability built inside a conventional TAD has become available recently. So that, the combined functions of AA & VM TADs plus dPABX are all housed in one product enclosure. The incremental retail price for this configuration is also about \$20.00 over the current TAD. The added advantage of this configuration is that existing telephone sets can continue be used without being replaced.

The retail costs listed above are current introductory pricing. They are expected to decrease significantly once mass-production begins.

5. Recommendation

A. Although the technology described above is based on a proprietary IP (Intellectual Property), Avinta® will license this IP to the industry at a very reasonable royalty rate (1% M.S.R.P. – Manufacturer Suggested Retail Price). The intention is to resolve this long time public nuisance that has also tied up much of the Commission's valuable resources.

B. Running the risk of extensive self-promotion, Avinta® does sincerely invite the Commission to review other related work that Avinta® has completed at <http://www.avinta.com/phoenix-1/home/phoenixhme.htm>. It would then become apparent that the solution proposed in this document is the beginning of a series of efforts that Avinta® hopes to assist the Commission in encouraging consumers to enjoy this new era of broadband communication.

Respectfully submitted,

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